FIG. 1

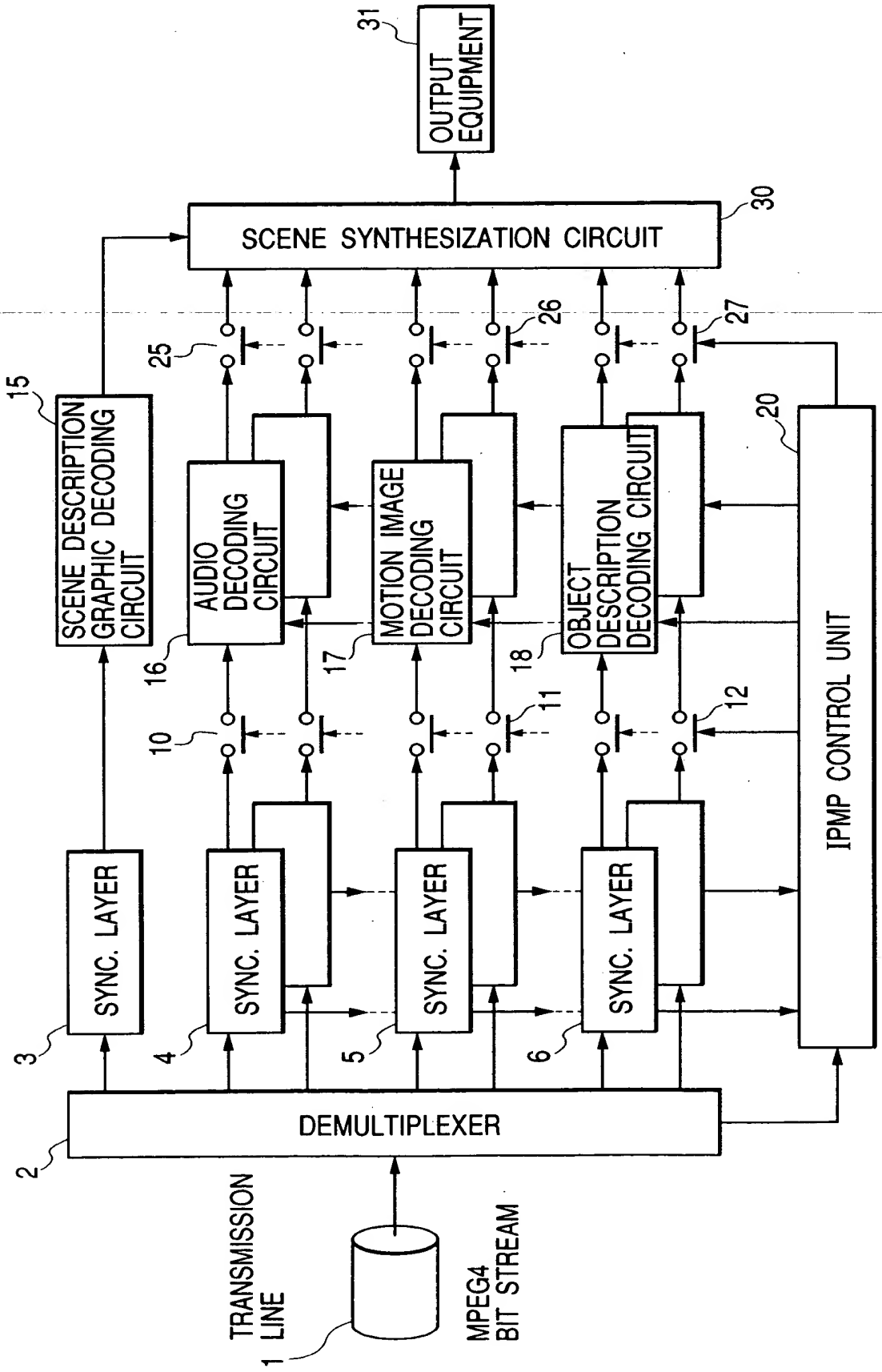
TRANSMISSION LINE
1
MPEG4 BIT STREAM
DEMULTIPLEXER
2
SYNC. LAYER
3
SYNC. LAYER
4
SYNC. LAYER
5
SYNC. LAYER
6
IPMP CONTROL UNIT
20
SCENE DESCRIPTION GRAPHIC DECODING CIRCUIT
15
AUDIO DECODING CIRCUIT
16
MOTION IMAGE DECODING CIRCUIT
17
OBJECT DESCRIPTION DECODING CIRCUIT
18
10
11
12
25
26
27
SCENE SYNTHESIZATION CIRCUIT
30
OUTPUT EQUIPMENT
31

FIG. 2

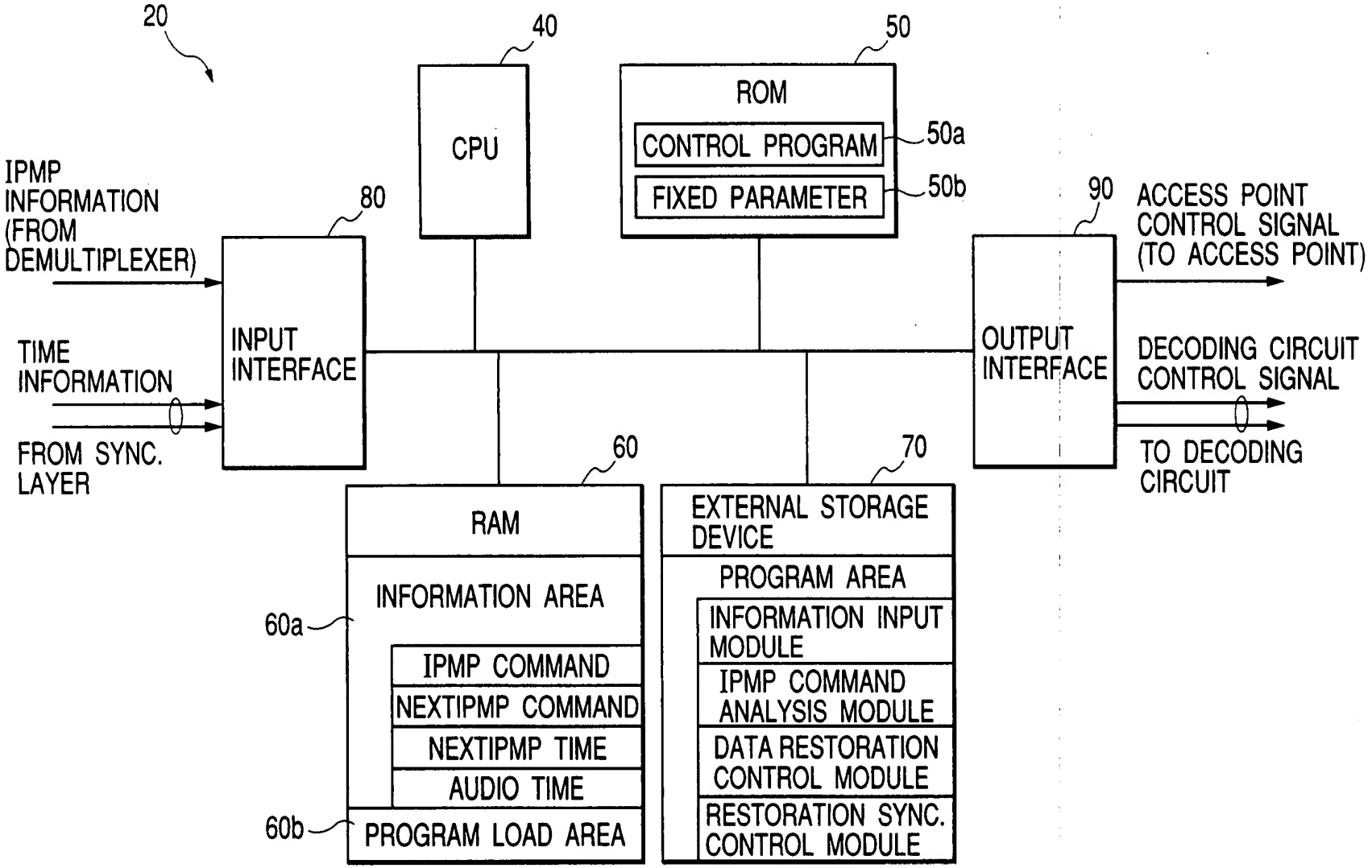
20
40
CPU
50
ROM
CONTROL PROGRAM
50a
FIXED PARAMETER
50b
IPMP INFORMATION (FROM DEMULTIPLEXER)
80
INPUT INTERFACE
TIME INFORMATION
FROM SYNC. LAYER
90
OUTPUT INTERFACE
ACCESS POINT CONTROL SIGNAL (TO ACCESS POINT)
DECODING CIRCUIT CONTROL SIGNAL
TO DECODING CIRCUIT
60
RAM
INFORMATION AREA
60a
IPMP COMMAND
NEXTIPMP COMMAND
NEXTIPMP TIME
AUDIO TIME
60b
PROGRAM LOAD AREA
70
EXTERNAL STORAGE DEVICE
PROGRAM AREA
INFORMATION INPUT MODULE
IPMP COMMAND ANALYSIS MODULE
DATA RESTORATION CONTROL MODULE
RESTORATION SYNC. CONTROL MODULE

FIG. 3

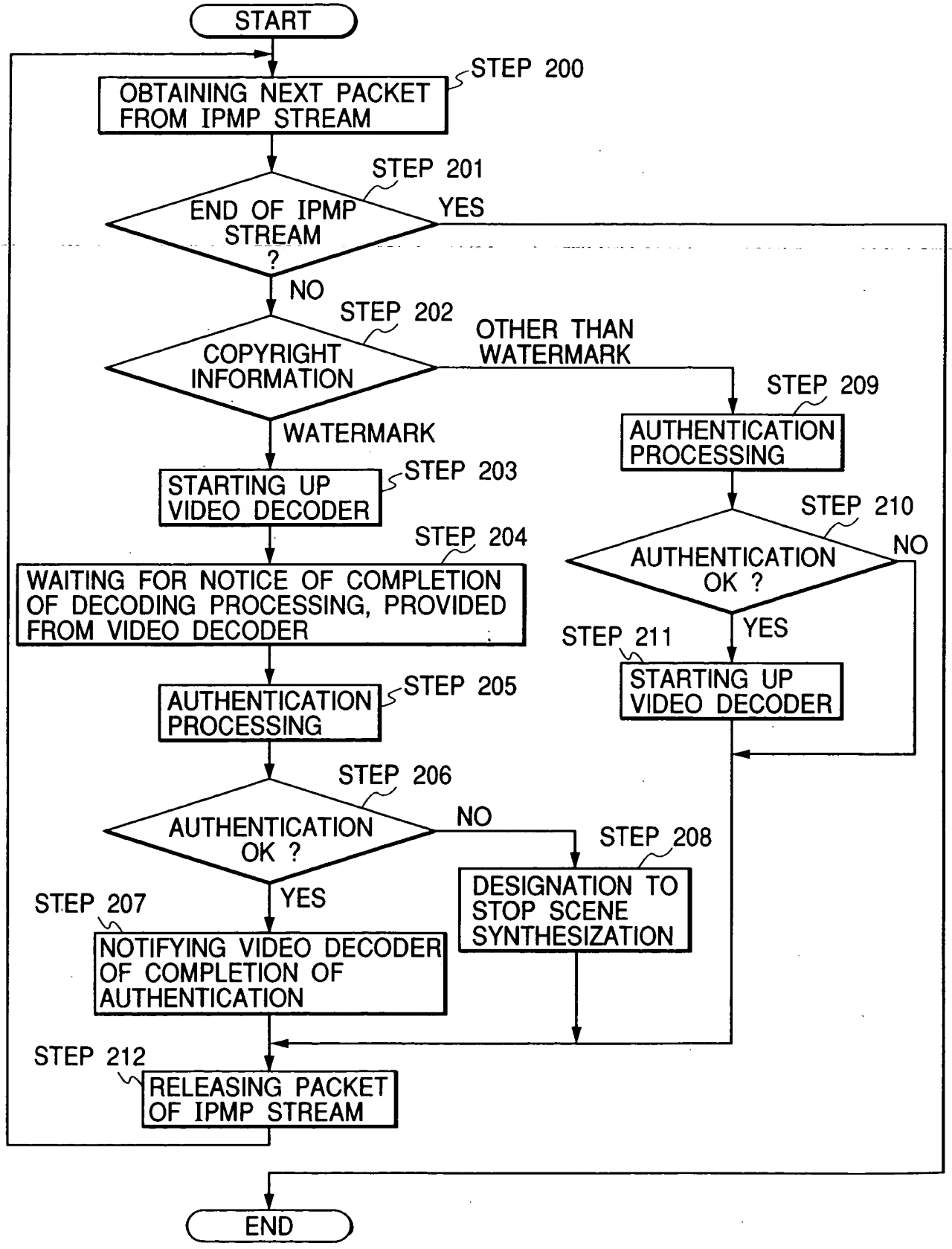
START
STEP 200
OBTAINING NEXT PACKET FROM IPMP STREAM
STEP 201
END OF IPMP STREAM ?
YES
NO
STEP 202
COPYRIGHT INFORMATION
OTHER THAN WATERMARK
WATERMARK
STEP 209
AUTHENTICATION PROCESSING
STEP 203
STARTING UP VIDEO DECODER
STEP 210
AUTHENTICATION OK ?
NO
YES
STEP 204
WAITING FOR NOTICE OF COMPLETION OF DECODING PROCESSING, PROVIDED FROM VIDEO DECODER
STEP 211
STARTING UP VIDEO DECODER
STEP 205
AUTHENTICATION PROCESSING
STEP 206
AUTHENTICATION OK ?
NO
STEP 208
DESIGNATION TO STOP SCENE SYNTHESIZATION
YES
STEP 207
NOTIFYING VIDEO DECODER OF COMPLETION OF AUTHENTICATION
STEP 212
RELEASING PACKET OF IPMP STREAM
END

FIG. 4

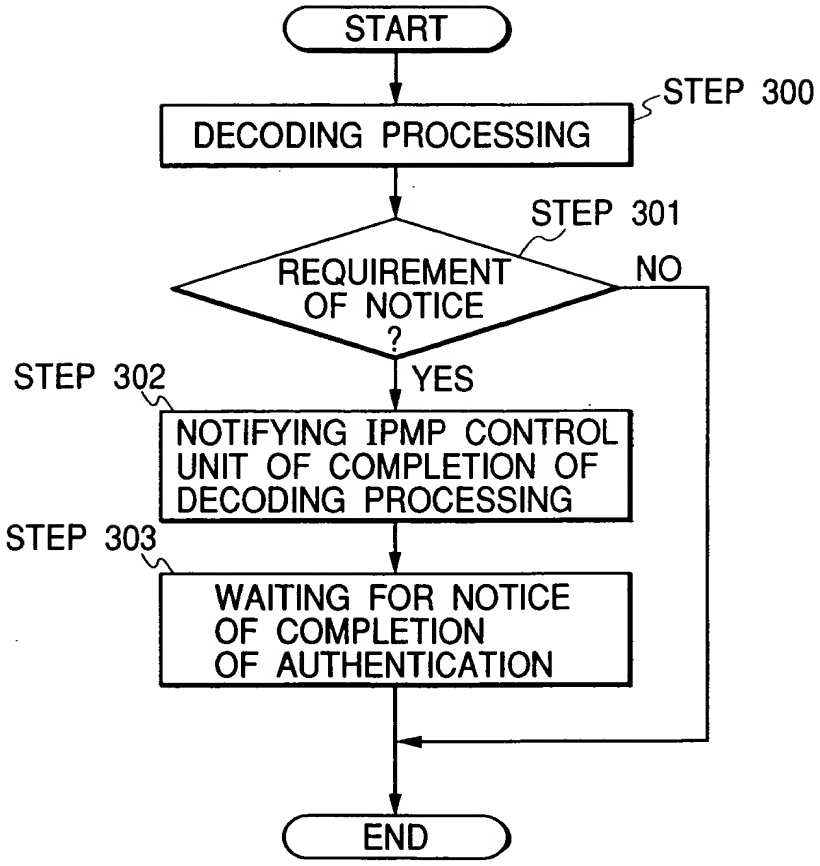

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FIG. 5

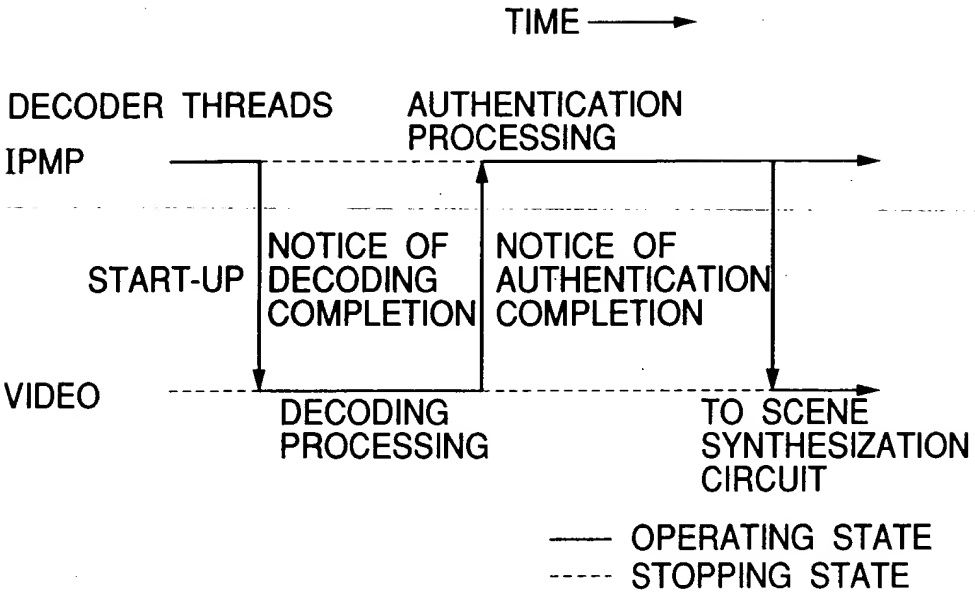
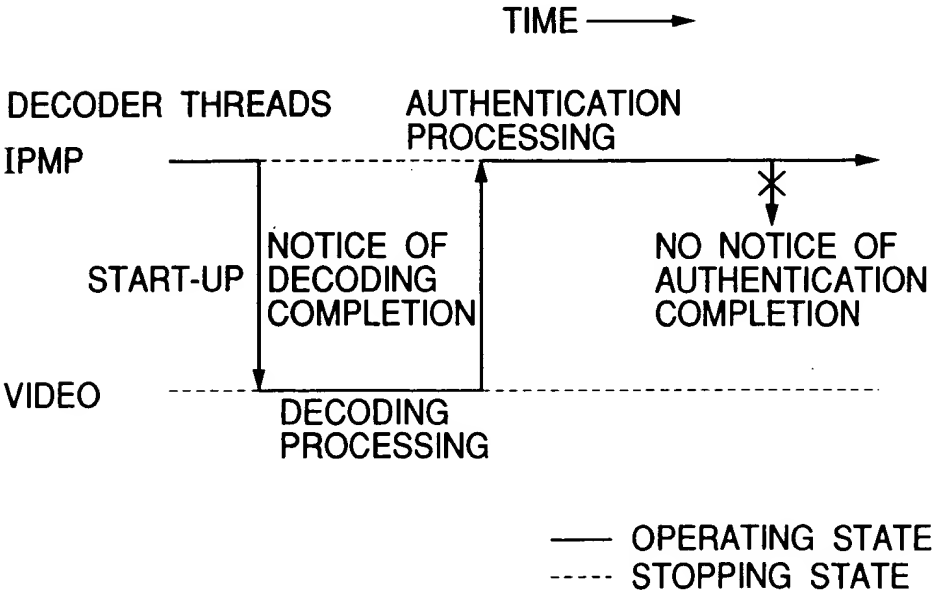

TIME
DECODER THREADS
AUTHENTICATION PROCESSING
IPMP
START-UP
NOTICE OF DECODING COMPLETION
NOTICE OF AUTHENTICATION COMPLETION
VIDEO
DECODING PROCESSING
TO SCENE SYNTHESIZATION CIRCUIT
OPERATING STATE
STOPPING STATE

FIG. 6


TIME
DECODER THREADS
AUTHENTICATION PROCESSING
IPMP
START-UP
NOTICE OF DECODING COMPLETION
NO NOTICE OF AUTHENTICATION COMPLETION
VIDEO
DECODING PROCESSING
OPERATING STATE
STOPPING STATE